

What is claimed is:

1. A method for driving an LCD in a dynamic inversion manner, comprising the steps of:

5 dividing a frame into a plurality of polarity blocks, each of the polarity blocks covering $2n$ horizontal scanning lines, wherein n is a positive integer;

generating an original polarity pattern which has positive polarities for n pixels in each column line of each polarity block and negative polarities for the other n pixels in each column line of each polarity block;

10 generating a polarity inversion group having $2n$ polarity patterns which record polarity distributions obtained by rotating each row of the original polarity block under a DC balance requirement; and

selecting the polarity patterns in the polarity inversion group for driving the pixels.

15 2. The method for driving an LCD in a dynamic inversion manner of Claim 1, wherein each polarity pattern in the polarity inversion group is obtained by sequentially rotating up the original polarity block by one row.

20 3. The method for driving an LCD in a dynamic inversion manner of Claim 1, wherein each polarity pattern in the polarity inversion group is obtained by sequentially rotating down the original polarity block by one row.

25 4. The method for driving an LCD in a dynamic inversion manner of Claim 1, wherein the polarity patterns in the polarity inversion group for driving the pixels are selected randomly.

5. The method for driving an LCD in a dynamic inversion manner of Claim 1, wherein each of the polarity patterns appears once in

one cycle.

6. A method for driving an LCD in a dynamic inversion manner, comprising the steps of:

5 dividing a frame into a plurality of polarity blocks, each of the polarity blocks covering $2n$ horizontal scanning lines, wherein n is a positive integer;

generating an original polarity pattern which has positive polarities for n pixels in each column line of each polarity block and negative polarities for the other n pixels in each column line of each polarity block;

10 generating a polarity pattern which records a polarity distribution obtained by rotating x rows of the original polarity block under a DC balance requirement, wherein x is a positive integer and not larger than $2n$; and

selecting the polarity pattern for driving the pixels.

15 7. The method for driving an LCD in a dynamic inversion manner of Claim 6, wherein the polarity pattern for driving the pixels is obtained by rotating up the original polarity block by one row.

20 8. The method for driving an LCD in a dynamic inversion manner of Claim 6, wherein the polarity pattern for driving the pixels is obtained by rotating down the original polarity block by one row.

9. The method for driving an LCD in a dynamic inversion manner of Claim 6, wherein the polarity pattern for driving the pixels is selected randomly.